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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,795	02/25/2002	Daniel C. Ziegler	0108	7876

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Armstrong World Industries, Inc.
2500 Columbia Avenue
P.O. Box 3001
Lancaster, PA 17604-3001

EXAMINER

A. PHI DIEU TRAN

ART UNIT	PAPER NUMBER
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3637

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/084,795

Applicant(s)

ZIEGLER ET AL.

Examiner

Phi D. A

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-9,16 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-9,16 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5, 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

“Up-lift classification of at least 90...roof assemblies” is indefinite as it is unclear what lifting force is being claimed, and the standard of test is subject to change.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 8-9, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carraro et al (4723749) in view of Pinquist (4905952) and Cumber (3599921).

Carraro et al shows a system comprising a main runner (76), each main runner having a vertical web and a bulb portion (77), a compression strut (30), a clip (figure 5), each clip having a first leg, a mid portion disposed between the first leg and the second leg (75), each first leg is in direct contact with and is secured to the vertical web of the main runner, each second leg is in direct contact with and is secured to the compression strut (inherently so as it is connected) and each mid-portion conforms to the bulb portion of a main runner, the bulb portion being interposed between the compression strut and the mid-portion, the first leg (figure 5 at 80) is

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secured to the main runner by a first fastening device selected from the group consisting of mechanical fastening devices and the second leg is secured to the compression strut (30) by a second fastening device selected from the group consisting of chemical device (material).

Carraro et al does not show a grid formed from a plurality of parallel extending main runners, and a plurality of cross runner extending between the main runners, a plurality of compression struts, a plurality of panels within the grid, a plurality of clips, the compression strut and the clips are discrete parts.

Pinquist shows a ceiling system comprising grid (figure 1) formed from a plurality of parallel extending main runners (21), and a plurality of cross runners (the ones perpendicular to the main runners) between the main runners, a plurality of compression struts (27), a plurality of panels (23) within the grid, a plurality of clips 42).

Cumber shows structures attached to a runner (12) made of discrete parts.

It would have been obvious to one having ordinary skill in art at the time of the invention to modify Carraro et al's structure to show a grid formed from a plurality of parallel extending main runners, and a plurality of cross runner extending between the main runners, a plurality of compression struts, a plurality of panels within the grid, a plurality of clips since it would allow for easy supporting of a ceiling systems formed of a grid formed from a plurality of parallel extending main runners and a plurality of cross runner extending between the main runners as taught by Pinquist, and having the attaching structures connecting to a runner made of discrete parts as taught by Cumber would have been obvious to one having ordinary skill in the art as using discrete parts to sandwich and connect to a runner is a well known alternative to

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sandwiching a runner with parts that snap fit over a runner as the parts provide the same function of connecting and sandwiching the runner in the middle.

Per claim 8, Carraro et al as modified shows the plurality of panels being downwardly accessible.

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carraro et al (4723749) in view of Cumber (3599921).

Carraro et al shows a system comprising a main runner (76), each main runner having a vertical web and a bulb portion (77), a compression strut (30), a clip (figure 5), each clip having a first leg, a mid portion disposed between the first leg and the second leg (75), each first leg is in direct contact with and is secured to the vertical web of the main runner, each second leg is in direct contact with and is secured to the compression strut (inherently so as it is connected) and each mid-portion conforms to the bulb portion of a main runner, the bulb portion being interposed between the compression strut and the mid-portion, the first leg (figure 5 at 80) is secured to the main runner by a first fastening device selected from the group consisting of mechanical fastening devices and the second leg is secured to the compression strut (30) by a second fastening device selected from the group consisting of chemical device (material).

Carraro et al does not show the compression strut and the clips are discrete parts.

Cumber shows structures attached to a runner (12) made of discrete parts.

It would have been obvious to one having ordinary skill in art at the time of the invention to modify Carraro et al's structure to show the compression strut and the clips are discrete parts as taught by Cumber because it would have been obvious to one having ordinary skill in the art as using discrete parts to sandwich and connect to a runner is a well known alternative to

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sandwiching a runner with parts that snap fit over a runner as the parts provide the same function of connecting and sandwiching the runner in the middle.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carraro et al (4723749) in view of Pinguist (4905952), and Cumber (3599921)

Carraro et al as modified shows all the claimed limitations except for the system being capable of meeting an up-lift classification 90.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Carraro et al's modified structure to show the system being capable of meeting an up-lift classification 90 because it would have been obvious to a designer to make the system as strong as needed to withstand strong uplifting force generated by strong winds, hurricane, and other elemental factors, and the strengthening of the system can be easily accomplished by thickening the material, or by providing strong material.

5. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carraro et al (4723749) in view of Pinguist (4905952), and Cumber (3599921).

Carraro et al as modified shows all the claimed limitations except for the struts being attached to the runners by the clips at an interval of about 2 feet or at an interval of up to about 12 feet..

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Carraro et al's modified structure to show the struts being attached to the runners by the clips at an interval of about 2 feet or at an interval of up to about 12 feet because it would have been an obvious matter of engineering design choice to attach the struts to the runner

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at intervals of 2 feet or 12 feet as it is up to the designer to choose the desired fastening forces between the struts and the runners for supporting the ceiling.

6. Claims 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carraro et al (4723749) in view of Cumber (3599921).

Carraro et al as modified shows all the claimed limitations except for the system being capable of meeting an up-lift classification 90.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Carraro et al's modified structure to show the system being capable of meeting an up-lift classification 90 because it would have been obvious to a designer to make the system as strong as needed to withstand strong uplifting force generated by strong winds, hurricane, and other elemental factors, and the strengthening of the system can be easily accomplished by thickening the material, or by providing strong material.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 5-9, 16, 22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows ceiling assemblies.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phi Dieu Tran A *PA*
2/5/07

LANNA MAI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

Lanna Mai